64E-6.005 Location and Installation.

All systems shall be located and installed so that with proper maintenance the systems function in a sanitary manner, do not create sanitary nuisances or health hazards and do not endanger the safety of any domestic water supply, groundwater or surface water. Sewage waste and effluent from onsite sewage treatment and disposal systems shall not be discharged onto the ground surface or directly or indirectly discharged into ditches, drainage structures, groundwaters, surface waters, or aquifers.
To prevent such discharge or health hazards:

(1) Systems and septage stabilization facilities established after the effective date of the rule shall be placed no closer than the minimum distances indicated for the following:

(a) Seventy-five feet from a private potable well as defined in paragraph 64E-6.002(44)(a), F.A.C., or a multi-family water well as defined in paragraph 64E-6.002(44)(c), F.A.C.

(b) One-hundred feet from a public drinking water well as defined in paragraph 64E-6.002(44)(b), F.A.C., if such a well serves a facility with an estimated sewage flow of 2000 gallons or less per day.

(c) Two-hundred feet from a public drinking water well as defined in paragraph 64E-6.002(44)(b), F.A.C., if such a well serves a facility with an estimated sewage flow of more than 2000 gallons per day.

(d) Fifty feet from a non-potable water well as defined in subsection 64E-6.002(39), F.A.C.

(e) Ten feet from any storm sewer pipe, to the maximum extent possible, but in no instance shall the setback be less than 5 feet.

(f) Fifteen feet from the design high-water line of retention areas, detention areas, or swales designed to contain standing or flowing water for less than 72 hours after a rainfall or the design high-water level of normally dry drainage ditches or normally dry individual-lot stormwater retention areas.

(2) Systems shall not be located under buildings or within 5 feet of building foundations, including pilings for elevated structures, or within 5 feet of mobile home walls, swimming pool walls, or within 5 feet of property lines except where property lines abut utility easements which do not contain underground utilities, or where recorded easements are specifically provided for the installation of systems for service to more than one lot or property owner.

(a) Sidewalks, decks and patios shall not be subject to the 5 foot setback, however, drainfields shall not be installed beneath such structures. Any tank located beneath a driveway shall have traffic lids as specified in paragraph 64E-6.013(1)(f), F.A.C. Concrete structures which are intended to be placed over a septic tank shall have a barrier of soil or plastic material placed between the structure and the tank so as to preclude adhesion of the structure to the tank.

(b) Systems shall not be located within 10 feet of water storage tanks in contact with the ground or potable water lines unless such lines are sealed with a water proof sealant within a sleeve of similar material pipe to a distance of at least 10 feet from the nearest portion of the system or the water lines themselves consist of schedule 40 PCV or stronger. In no case shall the water line be located within 24 inches of the onsite sewage treatment and disposal system. Potable water lines within 5 feet of the drainfield shall not be located at an elevation lower than the drainfield absorption surface. Non-potable water lines shall not be located within 24 inches of the system without backflow devices per Sections 381.0065(2)(l)1. and 2., F.S., being installed on the water line to preclude contamination of the water system.

(c) Systems shall be setback a minimum of 15 feet from groundwater interceptor drains.

(3) Except for the provisions of Section 381.0065(4)(g)1. and 2., F.S., systems and septage stabilization facilities shall not be located laterally within 75 feet of the boundries of surface water bodies. Systems and septage stabilization facilities shall be located a minimum of 15 feet from the design high water line of a swale, retention or detention area designed to contain standing or flowing water for less than 72 hours after a rainfall, or the design high water level of normally dry drainage ditches or normally dry individual lot storm water retention areas.

(4) Suitable, unobstructed land shall be available for the installation and proper functioning of the system. The minimum unobstructed area shall:

(a) Be at least 1.5 times as large as the drainfield absorption area required by rule. For example, if a 200 square feet drainfield is required, the total unobstructed area required, inclusive of the 200 square feet drainfield area, would be 300 square feet. Unobstructed soil area between drain trenches shall be included in the unobstructed area calculation.

(b) Be contiguous to the drainfield.

(c) Be in addition to the setbacks required in subsections (1), (2), and (3) above.

(5) Onsite sewage treatment and disposal systems if installed in fill material, the fill shall be required to settle for a period of at least 6 months, or has been compacted to a density comparable to the surrounding natural soil. The fill material shall be of a suitable, slightly limited soil material.

(6) To prevent soil smear and excessive soil compaction, drainfields shall not be installed in soils with textures finer than sand, loamy sand, or sandy loam when the soil moisture content is above the point at which the soil changes from semi-solid to plastic.

(7) Onsite sewage treatment and disposal systems shall be installed where a sewerage system is not available and when conditions in Sections 381.0065(4)(a)-(g), F.S., are met. Onsite graywater tank and drainfield systems may, at the homeowners' discretion, be utilized provided blackwater is disposed into a sanitary sewerage system when such sewerage system is available. Graywater systems may, at the homeowners' discretion, be utilized in conjunction with an onsite blackwater system where a sewerage system is not available for blackwater disposal.

(a) The minimum area of each lot under Section 381.0065(4)(a), F.S., shall consist of at least 1/2 acre (21,780 square feet) exclusive of all paved areas and prepared road beds within public rights-of-way or easements and exclusive of surface water bodies.

(b) The determination of lot densities under Section 381.0065(4)(b), F.S., shall be made on the basis of the net acreage of the subdivision which shall exclude from the gross acreage all paved areas and prepared road beds within public or private rights-of-way or easements and shall also exclude surface water bodies.

(c) Maximum daily sewage flow allowances specified in Sections 381.0065(4)(a), (b) and (g), F.S., shall be calculated on an individual lot by lot basis. The acreage or fraction of an acre of each lot or parcel of land shall be determined and this value shall be multiplied by 2500 gallons per acre per day if a public drinking water well serving a public system as defined in subparagraphs 64E-6.002(44)(b)1., 2., or 3., F.A.C., is utilized, or be multiplied by 1500 gallons per acre per day if a public drinking water well serving a public water system as defined in subparagraph 64E-6.002(44)(b)4., F.A.C., or a private potable well or cistern is utilized. Contiguous unpaved and non-compacted road rights-of-way, and easements with no subsurface obstructions that would affect the operation of drainfield systems, shall be included in total lot size calculations. Where an unobstructed easement is contiguous to two or more lots, each lot shall receive its pro rata share of the area contained in the easement. Surface water bodies shall not be included in total lot size calculations. subsection 64E-6.008(1), F.A.C., Table I, shall be used for determining estimated average daily sewage flows.

(d) Platted residential lots shall be subject to the requirements set forth in subsections 381.0065(4)(g)1. and 2., F.S.

(e) When portions of a lot or lots which were platted prior to January 1, 1972 are combined in such a manner that will decrease the total density of the subdivision, pre-1972 lot provisions shall apply. However, the maximum setback possible to surface water bodies shall be maintained with a minimum setback of 50 feet.

(8) Notwithstanding the requirements of this section, where an effluent transmission line consists of schedule 40 PVC, the transmission line shall be set back from private potable wells, irrigation wells or surface water bodies by not less than 25 feet when installed. Effluent transmission lines constructed of schedule 40 PVC shall be set back from property lines and building foundations by not less than 2 feet. Schedule 40 PVC effluent transmission lines shall be set back from potable water lines and storm water lines by no less than 5 feet unless all portions of the potable water line or storm water line within 5 feet of the effluent transmission line are:

(a) A minimum of 12 inches above the top of the effluent transmission line; and,

(b) Sealed with a waterproof sealant within a sleeve of schedule 40 PVC or stronger pipe or the water line itself consists ofschedule 40 PVC or stronger pipe.

(9) Onsite sewage treatment and disposal systems for estimated establishment domestic sewage flows exceeding 5000 gallons per day but not exceeding 10,000 gallons per day shall be located and installed under the following conditions.

(a) The average estimated daily sewage flow from the establishment shall be divided by the net land area associated with the establishment. The resulting number shall not exceed 2500 gallons per acre per day for establishments which use a water supply as defined in subparagraphs 64E-6.002(44)(b)1., 2. and 3, F.A.C.

(b) No more than 5000 gallons of wastewater shall be discharged into any single onsite sewage treatment and disposal system serving the establishment.

Rulemaking Authority 381.0065(3)(a), 489.553, 489.557(1) FS. Law Implemented 381.0065, 489.553 FS. History–New 12-22-82, Amended 2-5-85, Formerly 10D-6.46, Amended 3-17-92, 1-3-95, Formerly 10D-6.046, Amended 11-19-97, 2-3-98, 3-22-00, 5-24-04, 6-25-09.

64E-6.006 Site Evaluation Criteria.

Onsite sewage treatment and disposal systems may be utilized where lot sizes are in compliance with requirements ofsubsection 64E-6.005(7), F.A.C., and all of the following criteria are met:

(1) The effective soil depth throughout the drainfield installation site extends 42 inches or more below the bottom surface of the drainfield. Paragraphs (a), (b) and (c) list soil texture classes with their respective limitation ratings.

(a) Coarse sand not associated with an estimated wet season high water table within 48 inches below the absorption surface, sand, fine sand, loamy coarse sand, coarse sandy loam, loamy sand, and sandy loam are considered to be slightly limited soil materials.

(b) Very fine sand, loamy fine sand, loamy very fine sand, silt loam, silt, loam, fine sandy loam, very fine sandy loam, sandy clay loam, clay loam, silty clay loam, sandy clay and silty clay soil are considered to be moderately limited soil materials and are subject to evaluation with other influencing factors and local conditions.

(c) Clay, bedrock, oolitic limestone, fractured rock, hardpan, organic soil, gravel and coarse sand, when coarse sand is associated with an estimated wet season high water table within 48 inches of the absorption surface are severely limited soil materials. If severely limited soil material can be replaced with slightly limited soil material, see Footnotes 3 and 4 of Table III for minimum requirements. Where limestone is found to be discontinuous along the horizontal plane and is dispersed among slightly or moderately limited soils, the Department Policy for Drainfield Sizing in Areas With Discontinuous Limestone, August 1999, herein incorporated by reference, shall be used.

(2) The water table elevation at the wettest season of the year is at least 24 inches below the bottom surface of the drainfield. In addition, systems shall not be located where the undrained, naturally occurring wet season water table elevation in the area of the proposed system installation is determined to be at or above the elevation of the existing ground surface. However, when sufficient slightly limited fill material is permitted to be placed on the property to construct a properly designed onsite sewage treatment and disposal system, the department shall authorize construction based on the final lot elevation. This provision does not authorize a property owner to fill or modify the site without first obtaining necessary permits for site preparation work from other agencies of government having jurisdiction. The following information shall be used in determining the wet season water table elevation:

(a) U.S. Department of Agriculture Soil Conservation Service soils maps and soil interpretation records.

(b) Evaluation of soil color and the presence or absence of mottling.

(c) Evaluation of impermeable or semi-permeable soil layers.

(d) Evaluation of onsite vegetation.

(e) An onsite evaluation of the property which has used the above referenced sources of information and which has considered the season of the year when the evaluation was performed, historic weather patterns, and recent rainfall events.

(3) Setbacks in subsections 64E-6.005(1), (2), (3) and (4), F.A.C., are met.

(4) The site of the installation and the additional required unobstructed land referred to in subsection 64E-6.005(4), F.A.C., shall not be covered with asphalt or concrete, or be subject to vehicular traffic or other activity as defined in subsection 64E-6.002(41), F.A.C., which would adversely affect the soil, or the operation of the system.

(5) The site of the installation and the additional required unobstructed land referred to in subsection 64E-6.005(4), F.A.C., is not subject to saturation from sources such as artificial drainage of ground surfaces, driveways, roads or roof drains.

(6) The existing lot elevation at the site of the proposed system installation and any contiguous land referred to in subsection 64E-6.005(4), F.A.C., shall not be subject to frequent flooding. Except for areas affected by Section 381.0065(4)(t), F.S., fill material, if permitted, shall be placed in the area for the system and contiguous unobstructed area to raise the lot elevation above the 2 year flood.

(7) All materials incorporated herein may be obtained from the Bureau of Onsite Sewage Programs at www.MyFloridaEH.com or 4052 Bald Cypress Way, Bin A08, Tallahassee, Florida 32399-1713.

Rulemaking Authority 381.0011(4), (13), 381.0065(3)(a) FS. Law Implemented 381.0065, 381.00655 FS. History–New 12-22-82, Amended 2-5-85, Formerly 10D-6.47, Amended 3-17-92, 4-16-92, 1-3-95, Formerly 10D-6.047, Amended 3-22-00, 11-26-06.

64E-6.008 System Size Determinations.

(1) Minimum design flows for systems serving any structure, building or group of buildings shall be based on the estimated daily sewage flow as determined from Table I or the following:

(a) The DOH county health department shall accept, for other than residences and food operations, metered water use data in lieu of the estimated sewage flows set forth in Table I. For metered flow consideration, the applicant shall provide authenticated monthly water use data documenting water consumption for the most recent 12 month period for at least six similar establishments. Similar establishments are those like size operations engaged in the same type of business or service, which are located in the same type of geographic environment, and which have approximately the same operating hours. Metered flow values will not be considered to be a reliable indicator of typical water use where one or more of the establishments utilized in the sample has exceeded the monthly flow average for all six establishments by more than 25 percent or where the different establishments demonstrate wide variations in monthly flow totals. When metered flow data is accepted in lieu of estimated flows found in Table I, the highest flow which occurred in any month for any of the six similar establishments shall be used for system sizing purposes. Except for food operations which exceed domestic sewage waste quality parameters as defined in subsection 64E-6.002(15), F.A.C., where an existing establishment which has been in continuous operation for the previous 24 months seeks to utilize its own metered flows, the applicant shall provide authenticated monthly water use data documenting water consumption for the most recent 24 month period. The highest monthly metered flow value for an existing establishment shall be used for system sizing purposes.

(b) When onsite systems use multiple strategies to reduce the total estimated sewage flow or the drainfield size, only one reduction method shall be credited.

TABLE I
For System Design
ESTIMATED SEWAGE FLOWS

TYPE OF ESTABLISHMENT	GALLONS PER DAY
COMMERCIAL:	
Airports, bus terminals, train stations, port & dock facilities,	
Bathroom waste only	
(a) Per passenger	4
(b) Add per employee per 8 hour shift	15
Barber & beauty shops per service chair	75
Bowling alley bathroom waste only	
Per lane	50
Country club	
(a) Per resident	100
(b) Add per member or patron	25
(c) Add per employee per 8 hour shift	15
Doctor and Dentist offices	
(a) Per practitioner	250
(b) Add per employee per 8 hour shift	15
Factories, exclusive of industrial wastes	
gallons per employee per 8 hour shift	
(a) No showers provided	15
(b) Showers provided	25
Flea Market open 3 or less days per week	
(a) Per non-food service vendor space	15

(b) Add per food service establishment
using single service articles only per
100 Square feet of floor space…… 50
(c) Per limited food service establishment……... 25
(d) For flea markets open more than
3 days per week estimated flows
shall be doubled
Food operations
(a) Restaurant operating 16 hours or less
per day per seat…….. 40
(b) Restaurant operating more than 16 hours
per day per seat…… 60
(c) Restaurant using single service articles only
and operating 16 hours or less per day
per seat……. 20
(d) Restaurant using single service articles only
and operating more than 16 hours per day
per seat…… 35
(e) Bar and cocktail lounge per seat…… 20
add per pool table or video game……. 15
(f) Drive-in restaurant per car space…… 50
(g) Carry out only, including caterers
1. Per 100 square feet of floor space……..... 50
2. Add per employee per 8 hour shift…….. 15
(h) Institutions per meal……. 5
(i) Food Outlets excluding delis,
bakery, or meat department
per 100 square feet of floor space…… 10
1. Add for deli per 100 square feet of deli
floor space…… 40
2. Add for bakery per 100 square feet of bakery
floor space…….. 40
3. Add for meat department per
100 square feet of meat
department floor space……..... 75
4. Add per water closet…… 200
Hotels & motels
(a) Regular per room…… 100
(b) Resort hotels, camps, cottages
per room…… 200
(c) Add for establishments with self service
laundry facilities per machine……. 750
Mobile Home Park
(a) Per single wide mobile home
space, less than 4 single wide
spaces connected to a shared
onsite system……... 250
(b) Per single wide mobile home
space, 4 or more single
wide spaces are connected to a
shared onsite system…….... 225
(c) Per double wide mobile home
space, less than 4 double wide
mobile home spaces connected to a
shared onsite system…….. 300

(d) Per double wide mobile home space,
4 or more double wide mobile home
spaces connected to a shared
onsite system……... 275

Office building
per employee per 8 hour shift or……... 15
per 100 square feet of floor space, whichever is greater……... 15

Transient Recreational Vehicle Park
(a) Recreational vehicle space for
overnight stay, without water
and sewer hookup per vehicle space…… 50
(b) Recreational vehicle space for
overnight stay, with water and sewer
hookup per vehicle space…… 75

Service stations per water closet
(a) Open 16 hours per day or less…… 250
(b) Open more than 16 hours per day……... 325

Shopping centers without food or laundry
per square foot of floor space……... 0.1

Stadiums, race tracks, ball parks per seat……... 4

Stores per bathroom…… 200

Swimming and bathing facilities, public
per person…… 10

Theatres and Auditoriums, per seat…… 4

Veterinary Clinic
(a) Per practitioner……... 250
(b) Add per employee per 8 hour shift…… 15
(c) Add per kennel, stall or cage……... 20

Warehouse
(a) Add per employee per 8 hour shift…… 15
(b) Add per loading bay …… 100
(c) Self-storage, per unit (up to 200 units) …… 1
add 1 gallon for each 2 units or fraction thereof, for over 200 units, and
shall be in addition to employees, offices or living quarters flow rates.

INSTITUTIONAL:

Churches per seat which includes kitchen
wastewater flows unless meals prepared
on a routine basis…… 3
If meals served on a regular basis add
per meal prepared……... 5

Hospitals per bed which does not include
kitchen wastewater flows…… 200
add per meal prepared……... 5

Nursing, rest homes, adult congregate living
facilities per bed which does not
include kitchen wastewater flows…… 100
add per meal prepared……... 5

Parks, public picnic
(a) With toilets only per person……... 4
(b) With bathhouse, showers & toilets
per person……... 10

Public institutions other than schools and
hospitals per person which does not
include kitchen wastewater flows…… 100
add per meal prepared……... 5

Schools per student
(a) Day-type……. 10
(b) Add for showers……..……. 4
(c) Add for cafeteria……..……. 4
(d) Add for day school workers……..……... 15
(e) Boarding-type……..……. 75
Work/construction camps, semi-permanent
per worker……...……. 50

*****Approximate guide for finding tank & drainfield size*****
*****Tank size must be within one tank size of requirement*****

** Step # 1 – Find your gallons per day.*

RESIDENTIAL:
Residences
(a) Single or multiple family per dwelling unit
1 Bedroom with 750 sq. ft. or less of building area……..……. 100
2 Bedrooms with 751-1200 sq. ft. of building area……...……. 200
3 Bedrooms with 1201-2250 sq. ft. of building area…….. 300
4 Bedrooms with 2251-3300 sq. ft. of building area…….. 400
For each additional bedroom or each additional 750 square feet of building area or fraction thereof in a dwelling unit, system sizing shall be increased by 100 gallons per dwelling unit.
(b) Other per occupant……. 50

Footnotes to Table I:

1. For food operations, kitchen wastewater flows shall normally be calculated as 66 percent of the total establishment wastewater flow.

2. Systems serving high volume establishments, such as restaurants, convenience stores and service stations located near interstate type highways and similar high-traffic areas, require special sizing consideration due to expected above average sewage volume. Minimum estimated flows for these facilities shall be 3.0 times the volumes determined from the Table I figures.

3. For residences, the volume of wastewater shall be calculated as 50 percent blackwater and 50 percent graywater.

4. Where the number of bedrooms indicated on the floor plan and the corresponding building area of a dwelling unit in Table I do not coincide, the criteria which will result in the greatest estimated sewage flow shall apply.

5. Convenience store estimated sewage flows shall be determined by adding flows for food outlets and service stations as appropriate to the products and services offered.

6. Estimated flows for residential systems assumes a maximum occupancy of two persons per bedroom. Where residential care facilities will house more than two persons in any bedroom, estimated flows shall be increased by 50 gallons per each additional occupant.

(2) Minimum effective septic tank capacity and total dosing tank capacity shall be determined from Table II. However, where multiple family dwelling units are jointly connected to a septic tank system, minimum effective septic tank capacities specified in the table shall be increased 75 gallons for each dwelling unit connected to the system. With the exception noted in paragraph 64E-6.013(2)(a), F.A.C., all septic tanks shall be multiple chambered or shall be placed in series to achieve the required effective capacity. The use of an approved outlet filter device shall be required. Outlet filters shall be installed within or following the last septic tank or septic tank compartment before distribution to the drainfield. The outlet filter device requirement includes blackwater tanks, but does not include graywater tanks or grease interceptors or laundry tanks. Outlet filter devices shall be placed to allow accessibility for routine maintenance. Utilization and sizing of outlet filter devices shall be in accordance with the manufacturers' recommendations. The approved outlet filter device shall be installed in accordance with the manufacturers' recommendations. The Bureau of Onsite Sewage Programs shall approve outlet filter

devices per the department's Policy on Approval Standards For Onsite Sewage Treatment And Disposal Systems Outlet Filter Devices, November 2008, which is herein incorporated by reference.

**** Step # 2 Using column #1 find your tank size under column #2***

TABLE II
SEPTIC TANK AND PUMP TANK CAPACITY

(Column #1)	***(Column #2)***		
AVERAGE SEWAGE FLOW GALLONS/DAY	SEPTIC TANK MINIMUM EFFECTIVE CAPACITY GALLONS	PUMP TANK MINIMUM TOTAL CAPACITY GALLONS	
		Residential	Commercial
0-200	900	150	225
201-300	900	225	375
301-400	1050	300	450
401-500	1200	375	600
501-600	1350	450	600
601-700	1500	525	750
701-800	1650	600	900
801-1000	1900	750	1050
1001-1250	2200	900	1200
1251-1750	2700	1350	1900
1751-2500	3200	1650	2700
2501-3000	3700	1900	3000
3001-3500	4300	2200	3000
3501-4000	4800	2700	3000
4001-4500	5300	2700	3000
4501-5000	5800	3000	3000

(3) Where a separate graywater tank and drainfield system is used, the minimum effective capacity of the graywater tank shall be 250 gallons with such system receiving not more than 75 gallons of flow per day. For graywater systems receiving flows greater than 75 gallons per day, minimum effective tank capacity shall be based on the average daily sewage flow plus 200 gallons for sludge storage. Design requirements for graywater tanks are described in subsection 64E-6.013(2), F.A.C. Where separate graywater and blackwater systems are utilized, the size of the blackwater system can be reduced, but in no case shall the blackwater system be reduced by more than 25 percent. However, the minimum capacity for septic tanks disposing of blackwater shall be 900 gallons.

(4) Where building codes allow separation of discharge pipes of the residence to separate stubouts and where lot sizes and setbacks allow system construction, the applicant may request a separate laundry waste tank and drainfield system. Where an aerobic treatment unit is used, all blackwater, graywater and laundry waste flows shall be consolidated and treated by the aerobic treatment unit. Where a residential laundry waste tank and drainfield system is used:

(a) The minimum laundry waste trench drainfield absorption area for slightly limited soil shall be 75 square feet for a one or two bedroom residence with an additional 25 square feet for each additional bedroom. If an absorption bed drainfield is used the minimum drainfield area shall be 100 square feet with an additional 50 square feet for each additional bedroom over two bedrooms. The DOH county health department shall require additional drainfield area based on moderately limited soils and other site specific conditions, which shall not exceed twice the required amount of drainfield for a slightly limited soil.

(b) The laundry waste interceptor shall meet requirements of subsections 64E-6.013(2) and (8), F.A.C.

(c) The drainfield absorption area serving the remaining wastewater fixtures in the residence shall be reduced by 25 percent.

(5) The minimum absorption area for standard subsurface drainfield systems, graywater drainfield systems, and filled systems shall be based on estimated sewage flows and Table III so long as estimated sewage flows are 200 gallons per day or higher. When estimated sewage flows are less than 200 gallons per day, system size shall be based on a minimum of 200 gallons per day.

**** Step # 3 - To find drainfield size (non-mound), divide gallons per day by a loading rate under column "C" or "D". Use column A & B as a guide.***
**** Your figures will be a vague guide. Exact drainfield size will be determined by the Health Dept. after a complete site evaluation.***

TABLE III
For Sizing of Drainfields Other Than Mounds

(Column A) U.S. DEPARTMENT OF AGRICULTURE SOIL TEXTURE CLASSIFICATION	*(Column B)* SOIL TEXTURE LIMITATION (PERCOLATION RATE)	MAXIMUM SEWAGE LOADING RATE TO TRENCH & BED ABSORPTION SURFACE IN GALLONS PER SQUARE FOOT PER DAY	
		(Column C) TRENCH	*(Column D)* BED
Sand; Coarse Sand not associated with a seasonal water table of less than 48 inches; and Loamy Coarse Sand	Slightly limited (Less than 2 Min/inch)	0.80	0.60
Loamy Sand; Sandy Loam; Coarse Sandy Loam; and Fine Sand	Slightly limited (2-4 min/inch)	0.80	0.60
Loam; Fine Sandy Loam; Silt Loam; Very Fine Sand; Very Fine Sandy Loam; Loamy Fine Sand; Loamy Very Fine Sand; and Sandy Clay Loam	Moderately limited (5-10 min/inch)	0.65	0.35
Clay Loam; Silty Clay Loam; Sandy Clay; Silty Clay; and Silt	Moderately limited (Greater than 15 Min/inch but not exceeding 30 min/inch)	0.35	0.20
Clay; Organic Soils; Hardpan; and Bedrock	Severely limited (Greater than 30 Min/inch)	Unsatisfactory for standard subsurface System	
Coarse Sand with an estimated wet season High water table within 48 inches of the bottom of the proposed drainfield; Gravel or	Severely limited (Less than 1 Min/inch and a Water table less than 4 feet below The drainfield)	Unsatisfactory for standard subsurface System	

Fractured Rock or
Oolitic Limestone

Footnotes to Table III:

1. U.S. Department of Agriculture major soil textural classification groupings and methods of field identification are explained in Rule 64E-6.016, F.A.C. Laboratory sieve analysis of soil samples may be necessary to confirm field evaluation of specific soil textural classifications. The USDA Soil Conservation Service "Soil Textural Triangle" shall be used to classify soil groupings based on the proportion of sand, silt and clay size particles.

2. The permeability or percolation rate of a soil within a specific textural classification may be affected by such factors as soil structure, cementation and mineralogy. Where a percolation rate is determined using the falling head percolation test procedure described in the United States Environmental Protection Agency Design Manual for Onsite Wastewater Treatment and Disposal Systems, October, 1980, incorporated by reference into this rule, the calculated percolation test rate shall be used with Table III and evaluated by the DOH county health department with other factors such as history of performance of systems in the area in determining the minimum sizing for the drainfield area.

3. When all other site conditions are favorable, horizons or strata of moderately or severely limited soil may be replaced with slightly limited soil or soil of the same texture as the satisfactory slightly limited permeable layer lying below the replaced layer. The slightly limited permeable layer below the replaced layer shall be identified within the soil profile which was submitted as part of the permit application. The resulting soil profile must show complete removal of the moderately or severely limited soil layer being replaced and must be satisfactory to a minimum depth of 54 inches beneath the bottom surface of the proposed drainfield. The width of the replacement area shall be at least 2 feet wider and longer than the drain trench and for absorption beds shall include an area at least 2 feet wider and longer than the proposed bed. Drainfields shall be centered in the replaced area. Where at least 33 percent of the moderately limited soils at depths greater than 54 inches below the bottom of the drainfield have been removed to the depth of slightly limited soil, drainfield sizing shall be based on the following sewage loading rates. Where severely limited soils are being removed at depths greater than 54 inches below the bottom of the drainfield, 100 percent of the severely limited soils at depths greater than 54 inches shall be removed down to the depth of an underlying slightly limited soil. Maximum sewage loading rates for standard subsurface systems installed in replacement areas shall be 0.80 gallons per square foot per day for trench systems and 0.60 gallons per square foot per day for absorption beds in slightly limited soil textures. Where moderately limited soil materials are found beneath the proposed drainfield, and where system sizing is based on that moderately limited soil, soil replacements of less than 33% may be permitted.

4. Where coarse sand, gravel, or oolitic limestone directly underlies the drainfield area, the site shall be approved provided a minimum depth of 42 inches of the rapidly percolating soil beneath the bottom absorption surface of the drainfield and a minimum 12 inches of rapidly percolating soil contiguous to the drainfield sidewall absorption surfaces, is replaced with slightly limited soil material. Where such replacement method is utilized, the drainfield size shall be determined using a maximum sewage application rate of 0.80 gallons per square foot per day of drainfield in trenches and 0.60 gallon per square foot per day for drainfield absorption beds.

5. Where more than one soil texture classification is encountered within a soil profile and it is not removed as part of a replacement, drainfield sizing for standard subsurface drainfield systems and fill drainfield systems shall be based on the most restrictive soil texture encountered within 24 inches of the bottom of the drainfield absorption surface.

(6) All materials incorporated herein may be obtained from the Bureau of Onsite Sewage Programs at www.MyFloridaEH.com or 4052 Bald Cypress Way, Bin A08, Tallahassee, Florida 32399-1713.

Rulemaking Authority 381.0065(3)(a) FS. Law Implemented 381.0065 FS. History–New 12-22-82, Amended 2-5-85, Formerly 10D-6.48, Amended 3-17-92, 1-3-95, Formerly 10D-6.048, Amended 11-19-97, 3-22-00, 9-5-00, 11-26-06, 6-25-09.